m/023/010



United States Department of the Interior

BUREAU OF LAND MANAGEMENT HOUSE RANGE RESOURCE AREA

15 East 500 North P.O. Box 778 Fillmore, Utah 84631



IN REPLY REFER TO:

3800 (U-054) U-070569

July 8, 1994



ANDREW ROBINSON
ASH GROVE CEMENT COMPANY
LEAMINGTON PLANT
PO BOX 51
NEPHI UT 84648

Dear Mr. Robinson:

We appreciated your participation during the May 23, 1994, inspection of Ash Grove Cement Company's Navajo Sandstone Quarry. The purpose of this inspection was for representatives of the Ash Grove Cement Company, the Bureau of Land Management and the Utah Division of Oil, Gas and Mining to inventory the present disturbance and discuss reclamation requirements for closure of the quarry.

The quarry is located in the W_2 of Section 25, T. 13 S., R. 2 W., SLBM, and comprises portions of unpatented mining claims Silica, Silica #1 and Silica #2; UMC serial numbers 280308-280310. Rehabilitation of this site will entail reclaiming the mine access road, the loading pad, the road accessing the quarry benches, the quarry benches, the talus slopes, and the highwalls. The following is a summary of reclamation discussed during this inspection.

- The mine access road needs to be ripped and seeded. Crimping in hay as mulch may benefit revegetation of the road. The existing waterbars should be replaced or improved following ripping/mulching, but prior to seeding.
- The loading pad needs to be ripped and/or scarified and seeded. Exceptions, are areas where bedrock is exposed or near the surface, and areas that have revegetated with desirable species naturally.

At the west end of the loading pad drainage is currently ponding. Regrading is required to breach the existing berm and allow the natural drainage to flow across the pad toward the revegetation test plot.

- 3. The road accessing the quarry benches originates near the loading pad and splits into two roads. These lead to two quarry benches on the west facing slope. To some extent, these roads have naturally revegetated with desirable species. However, portions of the roads (primarily the upper areas) require additional scarification and seeding. Vehicular access to these roads should be blocked by placing boulders or berms at an appropriate location.
- Reclamation of the quarry benches, talus slopes and highwalls is critical due to unstable ground and bedrock conditions.

The sandstone boulders on the quarry floor should be placed against the southwest highwall to help stabilize the highwall. Then drilling and blasting portions of the quarry face to rubbilize the highwalls is

recommended. Subsequent grading of subsoil/soil over the rubbilized shotrock may be necessary, depending on the amount of the fines evident following blasting.

We suggest that you perform some soil analysis. This is especially important in sparsely vegetated areas. All regraded/recontoured areas should be left in a rough condition. Mulching should be considered to help increase revegetative success. The Division of Oil, Gas and Mining has observed beneficial results from the application of biosolids and suggests its consideration in this project. Based on the results of the soil analysis, other soil amendments and/or fertilizer could be used to aid successful revegetation. Seeding should take place in the late fall before the ground freezes. Below is BLM's recommended seed mixture.

PURE LIVE SEED MIXTURE	1)	bs/acre
GRASSES: Pubescent wheatgrass Thickspike wheatgras Bluebunch wheatgrass Nordan Crested wheat	s <u>Agropyron dasystachyum</u> <u>Agropyrom spicatum</u>	3 3 3 1 2
FORBS: Scarlet globemallow Ladac alfalfa Lewis flax Yellow sweetclover Small burnett	Sphaeralcea coccinea Medicaqo sativa Linum lewisii Melilotus officinalis Sanquisorba minor	2 2 1 1
SHRUBS: Antelope bitterbrush Rubber rabbitbrush Wood's rose	<u>Purshia tridentata</u> <u>Chrysothamnus nauseosus</u> Rosa woodsii	1 1 1

The seed weights given are for broadcasting. After broadcasting, the land should be lightly harrowed to bed the seeds. We suggest you check the seed prices with the seed supplier. If the cost for some of these species is unreasonable compared to other, then drop them off the list. Each category; grasses, forbs, shrubs should have at least three species. The BLM requires the purchase of pure live seed for the rehabilitation of federal land and may request a copy of the seed tag and purchase receipt for our files.

The Navajo Quarry is within the Stone Quarry Sheep Allotment. Active use occurs during the month of May. Impacts from grazing are expected to be minimal. However, fencing of the reclaimed areas could benefit revegetation efforts and possibly shorten the time for bond release.

The Navajo Quarry became inactive during the summer of 1987. This was concurrent with the commencement of activities at the Nielson Sandstone Quarry. The original disturbance at this site encompassed approximately eight (8) acres. Since then portions of the original disturbance have revegetated to acceptable levels. In essence, some rehabilitation has occurred naturally. We estimate there is presently less than five (5) acres of land in need of reclamation for closure of the quarry. Please submit your reclamation notice

at the earliest feasible time. Enclosed is a form that may be used for this purpose. If you need more space than is available on the form, you may attach additional pages to it.

If you have any questions regarding this letter, please feel free to call Rody Cox at (801) 743-6811.

Sincerely,

Rex Rowley Area Manager

ACTION

Enclosure
Notice form (p. 1)

cc: Michael Jackson, RDO
D. Wayne Hedberg, UDOGM